Serial No.: 10/635,387

Filed : August 6, 2003

Page : 2 of 27

#### Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

#### Listing of Claims:

1. (Withdrawn) A user interface comprising:

a plurality of selectable graphical elements, each of the graphical elements representing a respective attribute level of a product attribute;

a first area for presenting at least one of the plurality of selectable graphical elements that has been designated by a respondent as representing an unacceptable attribute level;

a second area for presenting one of the plurality of selectable graphical elements that has been designated by the respondent as representing a least-preferred attribute level; and

a third area for presenting one of the plurality of selectable graphical elements that has been designated by the respondent as representing a most-preferred attribute level.

#### 2-12. (Canceled)

13. (Currently amended) A computer-implemented method for determining preference information for a respondent, the method comprising:

accessing a computer memory storage system that stores information related to attributes that are characteristic of a type of product;

based on accessing the computer memory storage system, identifying attributes that are characteristic of the product from the computer memory storage system, each of the attributes identified from the computer memory storage system having different attribute levels that reflect different possible values for the attribute;

Serial No.: 10/635,387 Filed: August 6, 2003

Page : 3 of 27

for each of multiple of the identified attributes that are characteristic of the product, causing a display of a graphical user interface that presents selectable indications of multiple different attributes attribute levels for the attribute and that enables the respondent to provide feedback regarding the different attribute levels for the attribute, wherein:

the graphical user interface includes a region that is identified as corresponding to unacceptable attribute levels, a region that is identified as corresponding to a least-preferred attribute level, a region that is identified as corresponding to a most-preferred attribute level, and a region that is identified as corresponding to intermediately-preferred attribute levels, and

the graphical user interface is configured to:

enable the respondent to designate an attribute level for the attribute as an unacceptable attribute level for the attribute by selecting the selectable indication of the attribute level and dragging the selectable indication of the attribute level to the region of the graphical user interface identified as corresponding to unacceptable attribute levels for the attribute,

enable the respondent to designate an attribute level for the attribute as a least-preferred attribute level for the attribute by selecting the selectable indication of the attribute level and dragging the selectable indication of the attribute level to the region of the graphical user interface identified as corresponding to the least preferred attribute level for the attribute,

enable the respondent to designate an attribute level for the attribute as an intermediately preferred attribute level for the attribute by selecting the selectable indication of the attribute level and dragging the selectable indication of the attribute level to the region of the graphical user interface identified as corresponding to intermediately preferred attribute levels for the attribute, and

enable the respondent to designate an attribute level for the attribute as a most preferred attribute level for the attribute by selecting the selectable indication of the attribute level and dragging the selectable indication of the

Serial No.: 10/635,387 Filed: August 6, 2003

Page : 4 of 27

attribute level to the region of the graphical user interface identified as corresponding to the most preferred attribute level for the attribute;

for each of the multiple attributes, receiving, as a result of respondent interaction with the selectable indications of attribute levels for the attribute presented in the graphical user interface, respondent supplied designations for different attribute levels of the attribute, including at least a least-preferred attribute level for the attribute and a most-preferred attribute level for the attribute;

causing the graphical user interface to request the respondent to identify, from among the multiple attributes, a group of attributes that represents attributes that are important to the respondent relative to other of the multiple attributes;

receiving, as a result of respondent interaction with the graphical user interface, indications of attributes, from among the multiple attributes, that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes;

based on receiving the indications of attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes, sorting the multiple attributes into at least two different piles of attributes, the different piles being disjoint and a particular one of the piles including the attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes;

causing the graphical user interface to present to the respondent indications of the attributes belonging to the particular pile that includes the attributes that the respondent identified as belonging to the group of attributes that <u>are</u> important to the respondent relative to other of the multiple attributes and to request the respondent to provide a ranked order of the attributes belonging to the particular pile;

receiving, as a result of respondent interaction with the graphical user interface, an indication of a ranked order of the attributes belonging to the particular pile that includes the

Serial No.: 10/635,387 Filed: August 6, 2003

Page : 5 of 27

attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes;

based on receiving the indication of the ranked order of the attributes belonging to the particular pile that includes the attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes, identifying a particular attribute as an attribute that is most important to the respondent;

for each attribute among a <u>first</u> subset of the attributes belonging to the particular pile that includes the attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes, the subset excluding the most important attribute to the respondent and one or more other attributes belonging to the particular pile that includes the attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes, causing the graphical user interface to request the respondent to rate the importance of the difference between the respondent's least preferred attribute level for the attribute and the respondent's most preferred attribute level for the attribute relative to the difference between the respondent's least preferred attribute level for the most important attribute to the respondent and the respondent's most preferred attribute level for the most important attribute level to the respondent and the respondent;

for each attribute of the <u>first</u> subset of attributes, receiving, as a result of respondent interaction with the graphical user interface, an indication of the importance of the difference between the respondent's least preferred attribute level for the attribute and the respondent's most preferred attribute level for the attribute relative to the difference between the respondent's least preferred attribute level for the most important attribute to the respondent and the respondent's most preferred attribute level for the most important attribute to the respondent;

for each attribute of the <u>first</u> subset of attributes, assigning a relative importance value to the attribute based on the received indication of the importance of the difference between the respondent's least preferred attribute level for the attribute and the respondent's most preferred attribute level for the attribute relative to the difference between the respondent's least preferred

Serial No.: 10/635,387 Filed: August 6, 200

Filed : August 6, 2003 Page : 6 of 27

attribute level for the most important attribute to the respondent and the respondent's most preferred attribute level for the most important attribute to the respondent;

for each attribute among a second subset of several attributes that belong attributes, the second subset of attributes including attributes that belong to the particular pile that includes the attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes but that are not included in the <u>first</u> subset of attributes, attributes and excluding the most important attribute to the respondent, assigning a relative importance value to the attribute based on the ranking of the attribute within the ranked order of the attributes;

for each of at least some of the attribute levels of the attributes that belong to the particular pile that includes the attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes, calculating a part worth value for the attribute level as a function of the respondent supplied designation for the attribute level and the relative importance value assigned to the attribute to which the attribute level corresponds; and

causing the graphical user interface to display at least one of the calculated part worth values.

#### 14-18. (Canceled)

19. (Currently amended) A device comprising:

a processor; and

a storage device in communication with the processor and storing instructions adapted to be executed by the processor to:

access a computer memory storage system that stores information related to attributes that are characteristic of a type of product;

based on accessing the computer memory storage system, identify attributes that are characteristic of the product from the computer memory storage system, each of the

Serial No.: 10/635,387 Filed: August 6, 2003

Page : 7 of 27

attributes identified from the computer memory storage system having different attribute levels that reflect different possible values for the attribute;

for each of multiple of the identified attributes that are characteristic of the product, cause a display of a graphical user interface that presents selectable indications of multiple different attributes attribute levels for the attribute and that enables the respondent to provide feedback regarding the different attribute levels for the attribute, wherein:

the graphical user interface includes a region that is identified as corresponding to unacceptable attribute levels, a region that is identified as corresponding to a least-preferred attribute level, a region that is identified as corresponding to a most-preferred attribute level, and a region that is identified as corresponding to intermediately-preferred attribute levels, and

the graphical user interface is configured to:

enable the respondent to designate an attribute level for the attribute as an unacceptable attribute level for the attribute by selecting the selectable indication of the attribute level and dragging the selectable indication of the attribute level to the region of the graphical user interface identified as corresponding to unacceptable attribute levels for the attribute,

enable the respondent to designate an attribute level for the attribute as a least-preferred attribute level for the attribute by selecting the selectable indication of the attribute level and dragging the selectable indication of the attribute level to the region of the graphical user interface identified as corresponding to the least preferred attribute level for the attribute,

enable the respondent to designate an attribute level for the attribute as an intermediately preferred attribute level for the attribute by selecting the selectable indication of the attribute level and dragging the

Serial No.: 10/635,387 Filed: August 6, 2003

Page : 8 of 27

selectable indication of the attribute level to the region of the graphical user interface identified as corresponding to intermediately preferred attribute levels for the attribute, and

enable the respondent to designate an attribute level for the attribute as a most preferred attribute level for the attribute by selecting the selectable indication of the attribute level and dragging the selectable indication of the attribute level to the region of the graphical user interface identified as corresponding to the most preferred attribute level for the attribute;

for each of the multiple attributes, receive, as a result of respondent interaction with the selectable indications of attribute levels for the attribute presented in the graphical user interface, respondent supplied designations for different attribute levels of the attribute, including at least a least-preferred attribute level for the attribute and a most-preferred attribute level for the attribute;

cause the graphical user interface to request the respondent to identify, from among the multiple attributes, a group of attributes that represents attributes that are important to the respondent relative to other of the multiple attributes;

receive, as a result of respondent interaction with the graphical user interface, indications of attributes, from among the multiple attributes, that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes;

based on receiving the indications of attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes, sort the multiple attributes into at least two different piles of attributes, the different piles being disjoint and a particular one of the piles including the attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes;

Serial No.: 10/635,387 Filed: August 6, 2003

Page : 9 of 27

cause the graphical user interface to present to the respondent indications of the attributes belonging to the particular pile that includes the attributes that the respondent identified as belonging to the group of attributes that important to the respondent relative to other of the multiple attributes and to request the respondent to provide a ranked order of the attributes belonging to the particular pile;

receive, as a result of respondent interaction with the graphical user interface, an indication of a ranked order of the attributes belonging to the particular pile that includes the attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes;

based on receiving the indication of the ranked order of the attributes belonging to the particular pile that includes the attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes, identify a particular attribute as an attribute that is most important to the respondent;

for each attribute among a <u>first</u> subset of the attributes belonging to the particular pile that includes the attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes, the subset excluding the most important attribute to the respondent and one or more other attributes belonging to the particular pile that includes the attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes, cause the graphical user interface to request the respondent to rate the importance of the difference between the respondent's least preferred attribute level for the attribute and the respondent's most preferred attribute level for the most important attribute to the respondent and the respondent's most preferred attribute level for the most important attribute level to the respondent;

for each attribute of the <u>first</u> subset of attributes, receive, as a result of respondent interaction with the graphical user interface, an indication of the importance of the

Attorney's Docket No.: 24491-0004001 Applicant: Sev K. H. Keil et al.

Serial No.: 10/635,387 Filed : August 6, 2003

Page : 10 of 27

> difference between the respondent's least preferred attribute level for the attribute and the respondent's most preferred attribute level for the attribute relative to the difference between the respondent's least preferred attribute level for the most important attribute to the respondent and the respondent's most preferred attribute level for the most important attribute to the respondent;

> for each attribute of the first subset of attributes, assign a relative importance value to the attribute based on the received indication of the importance of the difference between the respondent's least preferred attribute level for the attribute and the respondent's most preferred attribute level for the attribute relative to the difference between the respondent's least preferred attribute level for the most important attribute to the respondent and the respondent's most preferred attribute level for the most important attribute to the respondent;

> for each attribute among a second subset of several attributes that belong attributes, the second subset of attributes including attributes that belong to the particular pile that includes the attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes but that are not included in the first subset of attributes, attributes and excluding the most important attribute to the respondent, assign a relative importance value to the attribute based on the ranking of the attribute within the ranked order of the attributes;

> for each of at least some of the attribute levels of the attributes that belong to the particular pile that includes the attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes, calculate a part worth value for the attribute level as a function of the respondent supplied designation for the attribute level and the relative importance value assigned to the attribute to which the attribute level corresponds; and

cause the graphical user interface to display at least one of the calculated part worth values.

Serial No.: 10/635,387 Filed: August 6, 2003

Page : 11 of 27

20-24. (Canceled)

### 25. (New) The method of claim 13 further comprising:

defining the first subset of attributes to include, with the exception of the most important attribute to the respondent, some threshold percentage of the most highly ranked attributes within the ranked order of the attributes; and

defining the second subset of attributes to include each of the remaining attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes but that are not within the threshold percentage of the most highly ranked attributes.

### 26. (New) The method of claim 25, wherein:

defining the first subset of attributes to include, with the exception of the most important attribute to the respondent, some threshold percentage of the most highly ranked attributes within the ranked order of the attributes includes defining the first subset of attributes to include the top twenty percent of the ranked attributes within the ranked order of the attributes with the exception of the most important attribute to the respondent; and

defining the second subset of attributes to include each of the remaining attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes but that are not within the threshold percentage of the most highly ranked attributes includes defining the second subset of attributes to include the bottom eighty percent of the ranked attributes within the ranked order of the attributes.

## 27. (New) The method of claim 13, wherein:

causing, for each attribute among the first subset of attributes, the graphical user interface to request the respondent to rate the importance of the difference between the respondent's least preferred attribute level for the attribute and the respondent's most preferred attribute level for the attribute relative to the difference between the respondent's least preferred attribute level for

Serial No.: 10/635,387 Filed: August 6, 2003 Page: 12 of 27

the most important attribute to the respondent and the respondent's most preferred attribute level for the most important attribute level to the respondent and receiving, for each attribute of the first subset of attributes, an indication of the importance of the difference between the respondent's least preferred attribute level for the attribute and the respondent's most preferred attribute level for the attribute relative to the difference between the respondent's least preferred attribute level for the most important attribute to the respondent and the respondent's most preferred attribute level for the most important attribute to the respondent includes:

establishing a pre-defined period of time for receiving indications of the importance of the difference between the respondent's least and most preferred attribute levels for corresponding attributes relative to the difference between the respondent's least and most preferred attribute levels for the most important attribute to the respondent, and

causing the graphical user interface to request the respondent to rate the importance of the difference between the respondent's least and most preferred attribute levels for corresponding attributes that belong to the particular pile relative to the difference between the respondent's least and most preferred attribute level for the most important attribute to the respondent and receiving indications of the importance of the difference between the respondent's least and most preferred attribute levels for corresponding attributes that belong to the particular pile relative to the difference between the respondent's least and most preferred attribute levels for the most important attribute to the respondent until such time as a determination is made that the pre-defined period of time has expired; and

assigning a relative importance value to each attribute among the second subset of attributes based on the ranking of the attribute within the ranked order of the attributes includes assigning a relative importance value to each attribute belonging to the particular pile for which an indication of the importance of the difference between the respondent's least and most preferred attribute levels for the attribute relative to the difference between the respondent's least and most preferred attribute levels for the most important attribute to the respondent was not

Attorney's Docket No.: 24491-0004001 Applicant: Sev K. H. Keil et al.

Serial No.: 10/635,387 : August 6, 2003 Filed

: 13 of 27 Page

received before determining that the pre-defined period of time expired with the exception of the most important attribute to the respondent.

### 28. (New) The method of claim 13, wherein:

identifying attributes that are characteristic of the product from the computer memory storage system includes identifying a particular attribute and attribute levels for the particular attribute that have pre-defined desirability rankings within a pre-defined desirability hierarchy for the particular attribute;

receiving, for each of the multiple attributes, respondent supplied designations for different attributes levels of the attribute includes receiving an unacceptable attribute designation for an attribute level of the particular attribute; and

the method further comprises:

identifying attribute levels of the particular attribute that have lower desirability rankings within the pre-defined desirability hierarchy for the particular attribute than the respondent-designated unacceptable attribute level of the particular attribute, and

automatically and without respondent designation, designating as unacceptable attribute levels for the particular attribute the attribute levels for the particular attribute identified as having lower desirability rankings within the pre-defined desirability hierarchy for the particular attribute than the respondent-designated unacceptable attribute level for the particular attribute.

# 29. (New) The method of claim 13, further comprising:

for each of the attribute levels of the multiple attributes for which respondent-supplied designations were received, assigning a quantifiable score to the attribute level based on the respondent-supplied designation for the attribute level, wherein calculating the part worth value for each of the at least some attribute levels includes multiplying the quantifiable score assigned to the attribute level based on the respondent-supplied designation for the attribute level by the relative importance value assigned to the attribute to which the attribute level corresponds.

Serial No. : 10/635,387

Serial No.: 10/635,387

Filed: August 6, 2003

Page: 14 of 27

30. (New) The device of claim 19, wherein the storage device further stores instructions adapted to be executed by the processor to:

define the first subset of attributes to include, with the exception of the most important attribute to the respondent, some threshold percentage of the most highly ranked attributes within the ranked order of the attributes; and

define the second subset of attributes to include each of the remaining attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes but that are not within the threshold percentage of the most highly ranked attributes.

### 31. (New) The device of claim 30, wherein:

the instructions adapted to be executed by the processor to define the first subset of attributes to include, with the exception of the most important attribute to the respondent, some threshold percentage of the most highly ranked attributes within the ranked order of the attributes include instructions adapted to be executed by the processor to define the first subset of attributes to include the top twenty percent of the ranked attributes within the ranked order of the attributes with the exception of the most important attribute to the respondent; and

the instructions adapted to be executed by the processor to define the second subset of attributes to include each of the remaining attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes but that are not within the threshold percentage of the most highly ranked attributes include instructions adapted to be executed by the processor to define the second subset of attributes to include the bottom eighty percent of the ranked attributes within the ranked order of the attributes.

# 32. (New) The device of claim 19, wherein:

Serial No.: 10/635,387 Filed: August 6, 2003

Page : 15 of 27

the instructions adapted to be executed by the processor to cause, for each attribute among the first subset of attributes, the graphical user interface to request the respondent to rate the importance of the difference between the respondent's least preferred attribute level for the attribute and the respondent's most preferred attribute level for the attribute relative to the difference between the respondent's least preferred attribute level for the most important attribute to the respondent and the respondent's most preferred attribute level for the most important attribute level to the respondent and to receive, for each attribute of the first subset of attributes, an indication of the importance of the difference between the respondent's least preferred attribute level for the attribute relative to the difference between the respondent's most preferred attribute level for the most important attribute to the respondent and the respondent's most preferred attribute level for the most important attribute to the respondent and the respondent's most preferred attribute level for the most important attribute to the respondent and the respondent shaped to be executed by the processor to:

establish a pre-defined period of time for receiving indications of the importance of the difference between the respondent's least and most preferred attribute levels for corresponding attributes relative to the difference between the respondent's least and most preferred attribute levels for the most important attribute to the respondent, and

cause the graphical user interface to request the respondent to rate the importance of the difference between the respondent's least and most preferred attribute levels for corresponding attributes that belong to the particular pile relative to the difference between the respondent's least and most preferred attribute level for the most important attribute to the respondent and receive indications of the importance of the difference between the respondent's least and most preferred attribute levels for corresponding attributes that belong to the particular pile relative to the difference between the respondent's least and most preferred attribute levels for the most important attribute to the respondent until such time as a determination is made that the pre-defined period of time has expired; and

Serial No.: 10/635,387 Filed: August 6, 2003

Page : 16 of 27

the instructions adapted to be executed by the processor to assign a relative importance value to each attribute among the second subset of attributes based on the ranking of the attribute within the ranked order of the attributes include instructions adapted to be executed by the processor to assign a relative importance value to each attribute belonging to the particular pile for which an indication of the importance of the difference between the respondent's least and most preferred attribute levels for the attribute relative to the difference between the respondent's least and most preferred attribute levels for the most important attribute to the respondent was not received before determining that the pre-defined period of time expired with the exception of the most important attribute to the respondent.

### 33. (New) The device of claim 19, wherein:

the instructions adapted to be executed by the processor to identify attributes that are characteristic of the product from the computer memory storage system include instructions that are adapted to be executed by the processor to identify a particular attribute and attribute levels for the particular attribute that have pre-defined desirability rankings within a pre-defined desirability hierarchy for the particular attribute;

the instructions adapted to be executed by the processor to receive, for each of the multiple attributes, respondent supplied designations for different attributes levels of the attribute include instructions adapted to be executed by the processor to receive an unacceptable attribute designation for an attribute level of the particular attribute; and

the storage device further stores instructions adapted to be executed by the processor to:

identify attribute levels of the particular attribute that have lower desirability rankings within the pre-defined desirability hierarchy for the particular attribute than the respondent-designated unacceptable attribute level of the particular attribute, and

automatically and without respondent designation, designate as unacceptable attribute levels for the particular attribute the attribute levels for the particular attribute identified as having lower desirability rankings within the pre-defined desirability

Serial No.: 10/635,387

Filed : August 6, 2003

Page : 17 of 27

hierarchy for the particular attribute than the respondent-designated unacceptable attribute level for the particular attribute.

#### 34. (New) The device of claim 19, wherein:

the storage device further stores instructions adapted to be executed by the processor to assign, for each of the attribute levels of the multiple attributes for which respondent-supplied designations were received, a quantifiable score to the attribute level based on the respondent-supplied designation for the attribute level; and

the instructions adapted to be executed by the processor to calculate the part worth value for each of the at least some attribute levels include instructions adapted to be executed by the processor to multiply the quantifiable score assigned to the attribute level based on the respondent-supplied designation for the attribute level by the relative importance value assigned to the attribute to which the attribute level corresponds.

35. (New) A computer-readable storage medium storing a computer program, the computer program including instructions that, when executed, cause a computer to:

access a computer memory storage system that stores information related to attributes that are characteristic of a type of product;

based on accessing the computer memory storage system, identify attributes that are characteristic of the product from the computer memory storage system, each of the attributes identified from the computer memory storage system having different attribute levels that reflect different possible values for the attribute;

for each of multiple of the identified attributes that are characteristic of the product, cause a display of a graphical user interface that presents selectable indications of multiple different attribute levels for the attribute and that enables the respondent to provide feedback regarding the different attribute levels for the attribute, wherein:

the graphical user interface includes a region that is identified as corresponding to unacceptable attribute levels, a region that is identified as corresponding to a least-

Serial No.: 10/635,387 Filed: August 6, 2003

Page : 18 of 27

preferred attribute level, a region that is identified as corresponding to a most-preferred attribute level, and a region that is identified as corresponding to intermediately-preferred attribute levels, and

the graphical user interface is configured to:

enable the respondent to designate an attribute level for the attribute as an unacceptable attribute level for the attribute by selecting the selectable indication of the attribute level and dragging the selectable indication of the attribute level to the region of the graphical user interface identified as corresponding to unacceptable attribute levels for the attribute,

enable the respondent to designate an attribute level for the attribute as a least-preferred attribute level for the attribute by selecting the selectable indication of the attribute level and dragging the selectable indication of the attribute level to the region of the graphical user interface identified as corresponding to the least preferred attribute level for the attribute,

enable the respondent to designate an attribute level for the attribute as an intermediately preferred attribute level for the attribute by selecting the selectable indication of the attribute level and dragging the selectable indication of the attribute level to the region of the graphical user interface identified as corresponding to intermediately preferred attribute levels for the attribute, and

enable the respondent to designate an attribute level for the attribute as a most preferred attribute level for the attribute by selecting the selectable indication of the attribute level and dragging the selectable indication of the attribute level to the region of the graphical user interface identified as corresponding to the most preferred attribute level for the attribute;

for each of the multiple attributes, receive, as a result of respondent interaction with the selectable indications of attribute levels for the attribute presented in the graphical user interface, respondent supplied designations for different attribute levels of the attribute, including at least a

Serial No. : 10/635,387
Filed : August 6, 2003

Page : 19 of 27

least-preferred attribute level for the attribute and a most-preferred attribute level for the attribute;

cause the graphical user interface to request the respondent to identify, from among the multiple attributes, a group of attributes that represents attributes that are important to the respondent relative to other of the multiple attributes;

receive, as a result of respondent interaction with the graphical user interface, indications of attributes, from among the multiple attributes, that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes;

based on receiving the indications of attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes, sort the multiple attributes into at least two different piles of attributes, the different piles being disjoint and a particular one of the piles including the attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes;

cause the graphical user interface to present to the respondent indications of the attributes belonging to the particular pile that includes the attributes that the respondent identified as belonging to the group of attributes that important to the respondent relative to other of the multiple attributes and to request the respondent to provide a ranked order of the attributes belonging to the particular pile;

receive, as a result of respondent interaction with the graphical user interface, an indication of a ranked order of the attributes belonging to the particular pile that includes the attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes;

based on receiving the indication of the ranked order of the attributes belonging to the particular pile that includes the attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes, identify a particular attribute as an attribute that is most important to the respondent;

Serial No.: 10/635,387 Filed: August 6, 2003

Page : 20 of 27

for each attribute among a first subset of the attributes belonging to the particular pile that includes the attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes, the subset excluding the most important attribute to the respondent and one or more other attributes belonging to the particular pile that includes the attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes, cause the graphical user interface to request the respondent to rate the importance of the difference between the respondent's least preferred attribute level for the attribute and the respondent's most preferred attribute level for the attribute to the difference between the respondent's least preferred attribute level for the most important attribute to the respondent and the respondent's most preferred attribute level for the most important attribute level to the respondent and the respondent;

for each attribute of the first subset of attributes, receive, as a result of respondent interaction with the graphical user interface, an indication of the importance of the difference between the respondent's least preferred attribute level for the attribute and the respondent's most preferred attribute level for the attribute relative to the difference between the respondent's least preferred attribute level for the most important attribute to the respondent and the respondent's most preferred attribute level for the most important attribute to the respondent;

for each attribute of the first subset of attributes, assign a relative importance value to the attribute based on the received indication of the importance of the difference between the respondent's least preferred attribute level for the attribute and the respondent's most preferred attribute level for the attribute relative to the difference between the respondent's least preferred attribute level for the most important attribute to the respondent and the respondent's most preferred attribute level for the most important attribute to the respondent;

for each attribute among a second subset of attributes, the second subset of attributes including attributes that belong to the particular pile that includes the attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes but that are not included in the first subset of attributes

Serial No.: 10/635,387

Filed : August 6, 2003 Page : 21 of 27

and excluding the most important attribute to the respondent, assign a relative importance value to the attribute based on the ranking of the attribute within the ranked order of the attributes;

for each of at least some of the attribute levels of the attributes that belong to the particular pile that includes the attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes, calculate a part worth value for the attribute level as a function of the respondent supplied designation for the attribute level and the relative importance value assigned to the attribute to which the attribute level corresponds; and

cause the graphical user interface to display at least one of the calculated part worth values.

36. (New) The computer-readable storage medium of claim 35, wherein the computer program further includes instructions that, when executed, cause a computer to:

define the first subset of attributes to include, with the exception of the most important attribute to the respondent, some threshold percentage of the most highly ranked attributes within the ranked order of the attributes; and

define the second subset of attributes to include each of the remaining attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes but that are not within the threshold percentage of the most highly ranked attributes.

# 37. (New) The computer-readable medium of claim 36, wherein:

the instructions that, when executed, cause a computer to define the first subset of attributes to include, with the exception of the most important attribute to the respondent, some threshold percentage of the most highly ranked attributes within the ranked order of the attributes include instructions that, when executed, cause a computer to define the first subset of attributes to include the top twenty percent of the ranked attributes within the ranked order of the attributes with the exception of the most important attribute to the respondent; and

Serial No.: 10/635,387 Filed: August 6, 2003

Page : 22 of 27

the instructions that, when executed, cause a computer to define the second subset of attributes to include each of the remaining attributes that the respondent identified as belonging to the group of attributes that are important to the respondent relative to other of the multiple attributes but that are not within the threshold percentage of the most highly ranked attributes include instructions that, when executed, cause a computer to define the second subset of attributes to include the bottom eighty percent of the ranked attributes within the ranked order of the attributes.

## 38. (New) The computer-readable medium of claim 35, wherein:

the instructions that, when executed, cause a computer to cause, for each attribute among the first subset of attributes, the graphical user interface to request the respondent to rate the importance of the difference between the respondent's least preferred attribute level for the attribute and the respondent's most preferred attribute level for the attribute relative to the difference between the respondent's least preferred attribute level for the most important attribute to the respondent and the respondent's most preferred attribute level for the most important attribute level to the respondent and to receive, for each attribute of the first subset of attributes, an indication of the importance of the difference between the respondent's least preferred attribute level for the attribute relative to the difference between the respondent's most preferred attribute level for the most important attribute to the respondent and the respondent's most preferred attribute level for the most important attribute to the respondent and the respondent's most preferred attribute level for the most important attribute to the respondent and the respondent's most preferred attribute level for the most important attribute to the respondent and the respondent's most preferred attribute level for the most important attribute to the respondent include instructions that, when executed, cause a computer to:

establish a pre-defined period of time for receiving indications of the importance of the difference between the respondent's least and most preferred attribute levels for corresponding attributes relative to the difference between the respondent's least and most preferred attribute levels for the most important attribute to the respondent, and

cause the graphical user interface to request the respondent to rate the importance of the difference between the respondent's least and most preferred attribute levels for

Serial No.: 10/635,387 Filed: August 6, 2003

Page : 23 of 27

corresponding attributes that belong to the particular pile relative to the difference between the respondent's least and most preferred attribute level for the most important attribute to the respondent and receive indications of the importance of the difference between the respondent's least and most preferred attribute levels for corresponding attributes that belong to the particular pile relative to the difference between the respondent's least and most preferred attribute levels for the most important attribute to the respondent until such time as a determination is made that the pre-defined period of time has expired; and

the instructions that, when executed, cause a computer to assign a relative importance value to each attribute among the second subset of attributes based on the ranking of the attribute within the ranked order of the attributes include instructions adapted to be executed by the processor to assign a relative importance value to each attribute belonging to the particular pile for which an indication of the importance of the difference between the respondent's least and most preferred attribute levels for the attribute relative to the difference between the respondent's least and most preferred attribute levels for the most important attribute to the respondent was not received before determining that the pre-defined period of time expired with the exception of the most important attribute to the respondent.

## 39. (New) The computer-readable medium of claim 35, wherein:

the instructions that, when executed, cause a computer to identify attributes that are characteristic of the product from the computer memory storage system include instructions that are adapted to be executed by the processor to identify a particular attribute and attribute levels for the particular attribute that have pre-defined desirability rankings within a pre-defined desirability hierarchy for the particular attribute;

the instructions that, when executed, cause a computer to receive, for each of the multiple attributes, respondent supplied designations for different attributes levels of the attribute include instructions adapted to be executed by the processor to receive an unacceptable attribute designation for an attribute level of the particular attribute; and

Serial No.: 10/635,387 Filed: August 6, 2003

Page : 24 of 27

the computer program further includes instructions that, when executed, cause a computer to:

identify attribute levels of the particular attribute that have lower desirability rankings within the pre-defined desirability hierarchy for the particular attribute than the respondent-designated unacceptable attribute level of the particular attribute, and

automatically and without respondent designation, designate as unacceptable attribute levels for the particular attribute the attribute levels for the particular attribute identified as having lower desirability rankings within the pre-defined desirability hierarchy for the particular attribute than the respondent-designated unacceptable attribute level for the particular attribute.

## 40. (New) The computer-readable medium of claim 35, wherein:

the computer program further includes instructions that, when executed, cause a computer to assign, for each of the attribute levels of the multiple attributes for which respondent-supplied designations were received, a quantifiable score to the attribute level based on the respondent-supplied designation for the attribute level; and

the instructions that, when executed, cause a computer to calculate the part worth value for each of the at least some attribute levels include instructions that, when executed, cause a computer to multiply the quantifiable score assigned to the attribute level based on the respondent-supplied designation for the attribute level by the relative importance value assigned to the attribute to which the attribute level corresponds.